OWNER MANUAL

PAMX2.62 - PAMX2.102

PROFESSIONAL MIXERS

PROFESSIONAL SPEAKERS, AMPLIFIERS AND ACCESSORIES

Audiodesign Srl
Via dell'industria, 28 - 42025 CAVRIAGO (RE)
+39 0522 941444 - Fax +39 0522 942363
www.audiodesign-pro.com
info@audiodesign.it

Introduction

Congratulations on the purchase of a professional mixing console PAMX2.
The mic pre-amplifiers are of high quality level and ensure the best sound quality and a very high dynamic.

A low noise and distortion-less circuitry assures a natural and transparent reproduction.
USB interface for computer connection.

Contents

Precautions:

Caution: When using any electric product , precautions should always be taken, including the following:

1) Read carefully all instructions before using the product.
2) To reduce the risk, strict supervision is necessary when the product is used near children.
3) Don't use the product near to water sources like sinks, kitchens, wet floors, pools, or similar or when raining.
4) In case hearing losses or buzzing occur, please contact a doctor.
5) This products should be located so that its position does not interfere or reduce its proper ventilation.
6) This product should be site away from heat sources such as radiators or any other product that generate heat.
7) This product should be connected to a power supply line only of the type described on the operating instructions. Check always the status of the power cable.
8) In case you need to replace the fuse, unplug power supply before replacement. The fuse is located over the power outlet and needs to be replaced with a fuse of same type and value. If the fuse blows again, please contact our service. DON'T replace it a second time with a higher value fuse.
9) Unplug power supply when left unused for a long period of time. Don't draw the cable but pull out the plug.
10) Make sure that power switch can always be easily reached.
11) Make sure that objects or liquids don't fall inside the product.
12) The product needs to be inspected by authorized or qualified personnel in case:

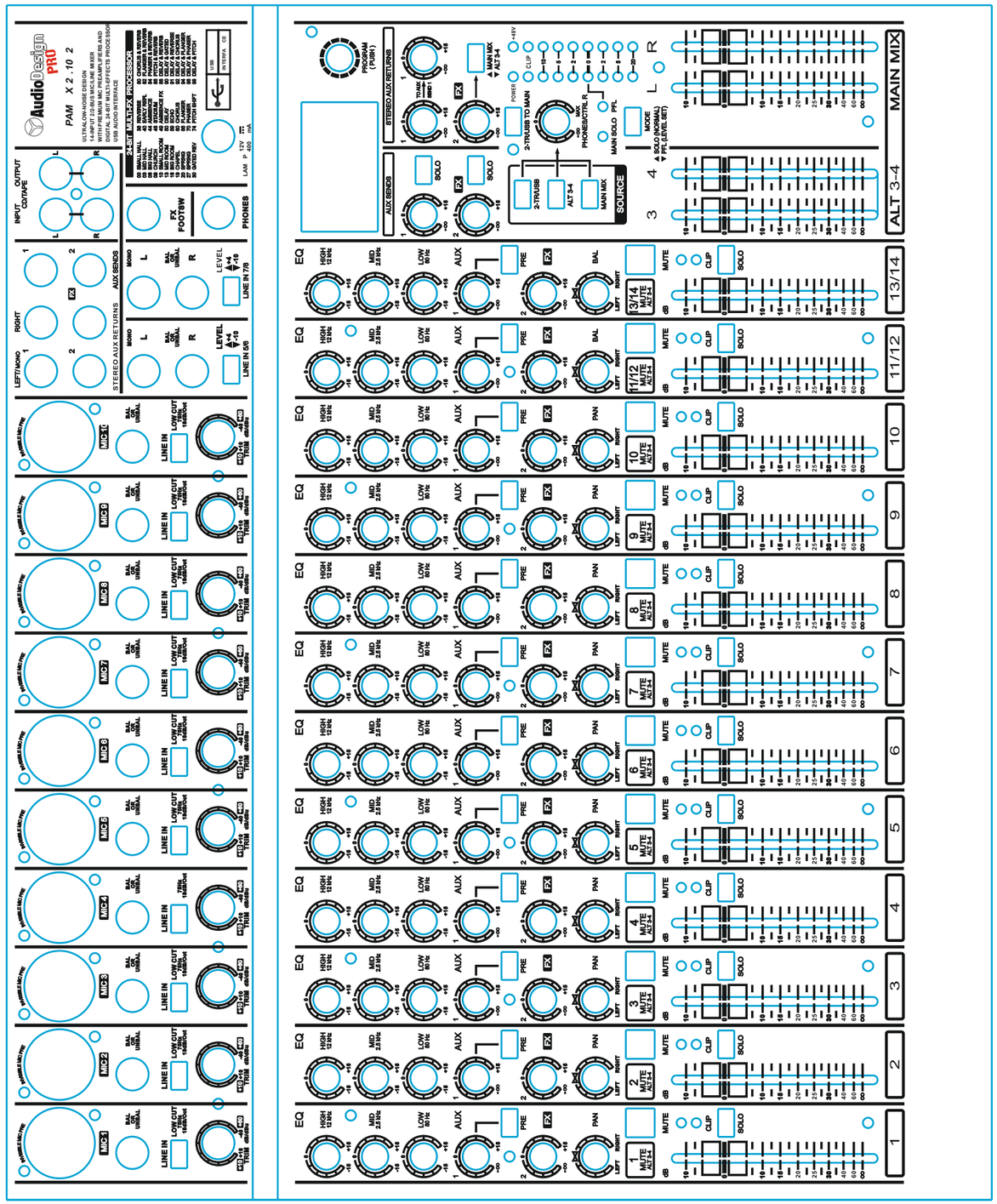
A- The power cable or plug are damaged
B- Objects or liquids fall inside the product
C- The product has been exposed to rain
D- The product doesn't appear to operate normally or exhibits a marked change in performance.
E- The product has fallen and been damaged.

13) DON'T operate on the product, except indications on the user's manual . Please refer to authorized and qualified personnel for any other operation.
14) Caution: Don't place objects on the product's power cable or place it in a position where it could be damaged or cause interferences. Improper installation could cause fire risk and/or personal injury.

Conformity:

Audiodesign Pro products comply with presently existing directives and standards.

SET UP MEMO



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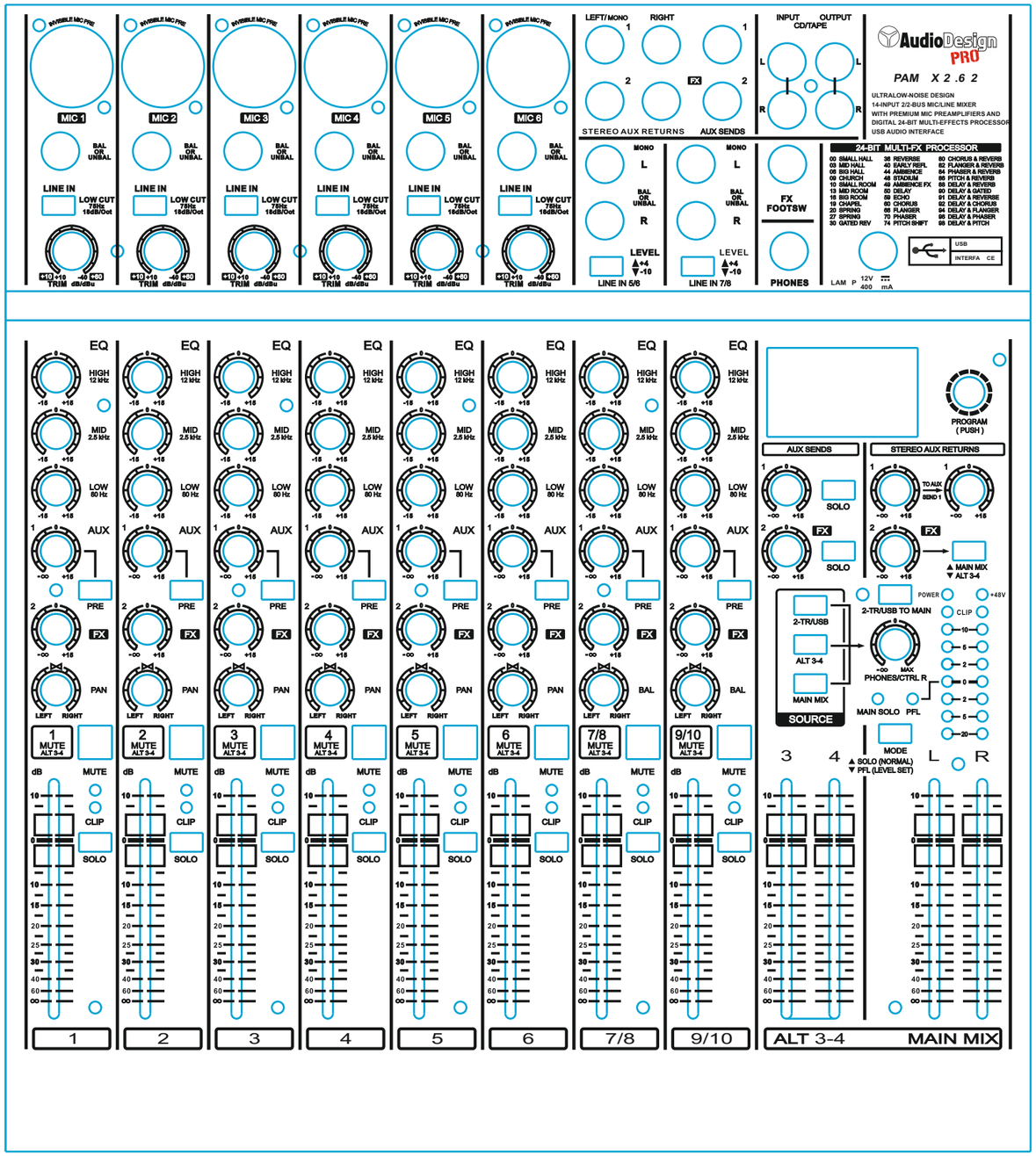
SET UP MEMO



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Service
All Audio Design PRO products have been inspected and tested before leaving the factory and , if properly used, they will work for many years. However, in case of any problem, please proceed in the following way:

Contact your dealer and inform about the defect you found
In case it won't be possible to solve the problem with the dealer, the product needs to be returned, preferably in its original packaging or in a proper packing to protect it during the transport. Purchase documents must be produced too.
Your dealer will arrange the shipment to our service centre.

QUICK START:
Start up:
1. Turn the power switch OFF.
2. Set "down" all TRIM controls (all counter clockwise) and FADER (all down) .
3. Center EQ controls (High - Mid - Low) and PAN controls (12 hours).
4. Set all push buttons in their "off" position (button up).
5. Set "down" all master section controls (counter clockwise and down)

Connections:
If you already know how you want to connect the mixer, go ahead and connect. If you prefer to inspect operation, please follow these instructions:
1. Plug a microphone or a mono signal source into one of the mono channels.
2. or a stereo signal source into one the stereo channels.
3. Connect MAIN OUTPUTS to an amplifier (XLR Balanced / Jack Balanced).
4. Turn power switch on. The blue led (POWER) lights up.

Set the levels:
1. Push the button "MODE" to use LED level indicators , in PFL mode (Level Set)
2. Push the button "SOLO " of the channel you intend to set up.
3. Set the TRIM potentiometer of the channel until the LED indicators (left column) are next to "0" level or in any case never over +5 level. Avoid absolutely to reach level + 10/Clip.
4. Release button "SOLO" of the channel you have just set up.
5. Repeat procedure from point 2 to point 4 for each channel you intend to connect

Mixing:
1. Set the FADER of each channel at "0" position
2. Release the button "MODE" to set it in position "SOLO" (NORMAL)
3. Turn the button "MAIN MIX" to see outlet signal level on the LED indicators.
4. Turn up "MAIN MIX" to desired level, in relation to the amplifiers / speakers you are using. Preferably, don't exceed level "0" or "+5" on the LED indicators.
5. Adjust FADER of each channel to obtain your own mix.
6. If necessary, adjust tones and repeat above " set levels" procedures

General indications:
1. The optimum FADER position is near to 0 while the optimum position for the MAIN MIX is the one that don't exceed level 0 / +5 on the LED level indicators.
2. Check that the level of each power input is the same that you set up during the "set the levels" operations, even if you have eventually operated on EQ of each channel. If necessary, each channel can be adjusted even during the performance through TRIM set up and monitored throught the LED indicators. Avoid absolutely that CLIP indicator of each channel lights up.
3. In case you intend to connect further sources, please take care to turn down "MAIN MIX" slider

MONO CHANNELS

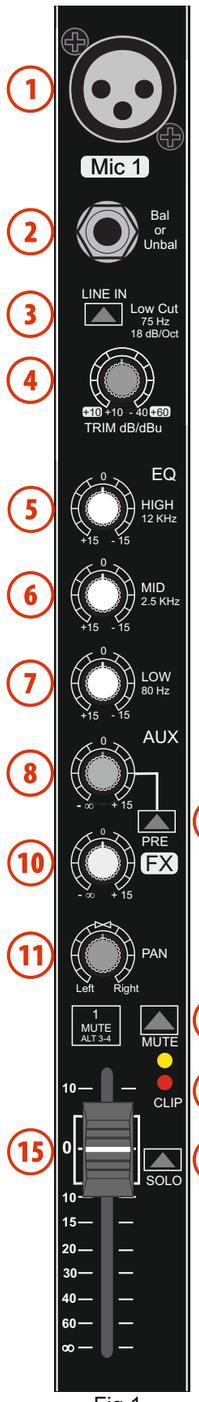

Fig 1

1. MIC: XLR balanced microphone input for dynamic and capacitor microphones. By means of the XLR connector, it's possible to feed condenser microphones. Operate button "PHANTOM ON" to activate this function (located on the rear panel) This function is monitored through the red LED switch on + 48 V located over the LED level indicators. Use of dynamic microphones with phantom power supply is generally not recommended. *
2. LINE: balanced or unbalanced line level input , 6,3 mm. Jack connector.
   Important: DON'T use MIC and LINE input signal at the same time !!!! *
3. This switch activates high-pass filter at 75 Hz - 18dB/Oct
4. TRIM: To adjust channel input level.
Should always be completely turned counter clockwise during connection of any source
5. EQ HIGH: This control adjusts +/- 15 dB with a "shelving" curve shape
at 12 kHz.
6. EQ MID: This control adjusts +/- 15 dB with a band center at 2.5 kHz.
7. EQ LOW: This control adjusts +/- 15 dB with a "shelving" curve shape at 80 Hz.
8. AUX: This control adjusts the output signal level
AUX SENDS 1, controlled through general adjustment (18). This signal is normally "post" FADER but could become "pre" FADER by operating the button (9)
9. This button operates the pre/post FADER level of the AUX control
10. FX: This control adjusts signal level to send to AUX SENDS 2 and to DSP, controlled through general adjustment (19). This signal is always "post" FADER
11. PAN: It adjusts the stereo scene by adjusting the signal levels to send to right and left outputs.
12. MUTE: This dual-purpose switch turns off the channel and sends at the same time a signal to an alternative mixing (ALT 3/4). Function is on when yellow LED lights up.
13. CLIP: The red LED is dual-purpose too: it indicates "SOLO" function (See point 14) or indicates CLIPPING mode.
Important: in case LED lights up indicating clipping mode, operate by reducing the TRIM
14. SOLO: This button sends the signal to PHONES and CONTROL ROOM OUT outlets and allows you to hear signals through your headphones and view signal on LED level indicators. Operating the "MODE" switch of the main section, it's possible to choose pre or post FADER signal.
15. FADER: It adjusts the level of the channel signal.

* See connection scheme on page 7

SCHEMA A BLOCCHI

PORTA USB

Audiodesign PRO professional mixers PAMX2 series, are supplied with a full speed USB port which you can connect to a computer and allows you to exchange CD-quality audio between mixer and computer; mixer operates also as and external soundcard.

Recording on PC can be made using the computer's built-in audio recorder, or better, using a dedicated software.

To ensure that the mixer is correctly recognized by the PC, always turn on the mixer before inserting USB cable into the PC.
When turning off, turn off the computer first until shut down process is completed and then turn off the mixer.

Windows automatically recognizes the mixer at the first connection and proceed to install necessary drivers, eventually will require to insert the Windows CD.

Open the control panel and select "USB Audio Codec" as default sound recording and playback device. Also for Macintosh, the selection of "USB Audio Codec" is the only action required.

Better performances can be obtained using specific Digital Audio Workstation software, in which case the specific installation instruction must be followed.

To use the mixer for playback from PC, operate buttons and controls 2 TR/USB, for MAIN MIX or PHONES/CTRL R outputs.

For recording to PC from Mixer while it's working, start registration on PC's software and adjust its level from the MAIN MIX Fader.

SPECIFICATIONS

Section	Level and datas	Connector
MONO INPUT CHANNELS		
Mic In	Sensitivity from 0 to - 60 dB Impedance 2 Kohm	XLR-F Balanced
Line In	Sensitivity from - 10 a + 4 dB Impedance 10-20 Kohm (Bal-Unbal)	Jack Balanced Jack Unbalanced
EQ	HIGH ±15 dB @ 12 KHz shelving MID ±15 dB @ 2.5 KHz peaking LOW ±15 dB @ 80 Hz shelving	
STEREO INPUT CHANNELS		
Line In	Sensitivity from - 10 a + 4 dB Impedance 20 Kohm	Jack Balanced Jack Unbalanced
EQ	HIGH ±15 dB @ 12 KHz shelving MID ±15 dB @ 2.5 KHz peaking LOW ±15 dB @ 80 Hz shelving	
MASTER SECTION		
MAIN MIX OUT	Nominal Output level + 4 dBu	XLR / Jack Bal.
C. ROOM output	Nominal Output level + 4 dBu	Jack Unbal mono
AUX SENDS 1	Nominal Output level + 4 dBu	Jack Unbal mono
AUX SENDS 2	Nominal Output level + 4 dBu	Jack Unbal mono
2-TRK - CD/TAPE	Nominal Output level 0 dBu Nominal Output level - 10 dBv	RCA
HEADPHONES	Min Impedance 32 ohm Max Output (2x) 193 mW	Jack Stereo
DIGITAL EFFECT PROCESSOR		
Preset	Reverbs: HALL, ROOM, VOCAL e PLATE Delay STEREO, MONO e TAP Modulations CHORUS e FLANGER Combinations REV + STEREO DELAY, REV + MONO DELAY, REV +CHORUS e REV + FLANGER	
USB INTERFACE		
Version	Fully compliant with USB 1.1	
Resolution	16-Bit Delta Sigma ADC e DAC	
Sampling Rate	DAC: 32, 44.1, 48 kHz ADC: 8, 11.025, 16, 22.05, 32, 44.1, 48 kHz	
MAIN SPECIFICATIONS		
Max Level	all outputs +22 dBu	
Crosstalk	meas at 1 KHz > 82 dB	
Hum and Noise	unweighted < -93 dBu	
THD + Noise	a +4dB, 1kHz < 0,008 %	

	PAMX 2.62	PAMX 2.102
Weight	4.0 Kg	5.3 Kg
Dimensions (WxDxH)	34.4 x 35 x 11.2 cm	45 x 35 x 11.2 cm

STEREO CANNELS

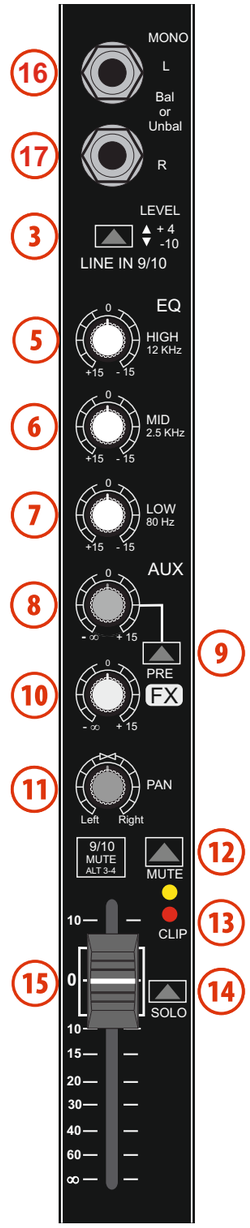

Fig 2

16. L channel of a stereo source or a mono signal can be connected to this 6,3 mm Jack input. Signal can be either balanced or unbalanced*
17. Only R channel of a stereo signal can be connected to this 6.3 mm input
3. This switch sets the channel input level (+ 4 / - 10 dB attenuation)
5. EQ HIGH: This control adjusts +/- 15 dB with a "shelving" curve shape at 12 kHz.
6. EQ MID: This control adjusts +/- 15 dB with a band center at 2.5 kHz.
7. EQ LOW: This control adjusts +/- 15 dB with a "shelving" curve shape at 80 Hz.
8. AUX:This control adjusts the output signal level
AUX SENDS 1, controlled through general adjustment (18). This signal is normally "post" FADER but could become "pre" FADER by operating the button (9)
9. This button operates the pre/post FADER level of the AUX control
10. FX: This control adjusts signal level to send to AUX SENDS 2 and to DSP, controlled through general adjustment (19).This signal is always "post" FADER
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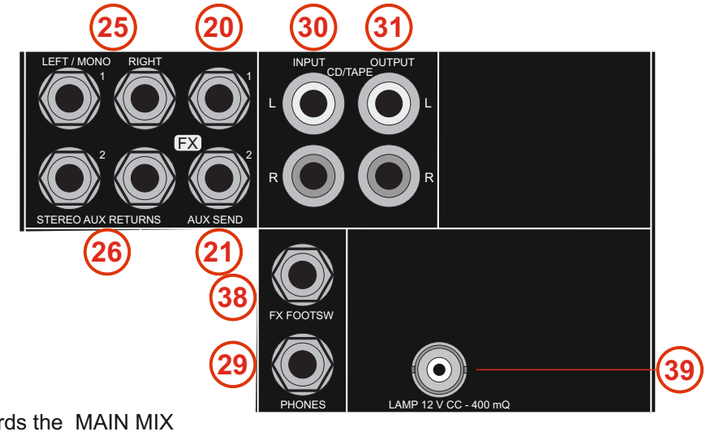
12. MUTE: This dual-purpose switch turns off the channel and sends at the same time a signal to an alternative mixing (ALT 3/4). Function is on when yellow LED lights up.

13. CLIP: The red LED is dual-purpose too: it indicates "SOLO" function (See point 14) or indicates CLIPPING mode.
Important: in case LED lights up indicating clipping mode, operate by reducing the TRIM
14. SOLO: This button sends the signal to PHONES and CONTROL ROOM OUT outlets and allows you to hear signals through your headphones and view signal on LED level indicators. Operating the "MODE" switch of the main section, it's possible to choose pre or post FADER signal.

15. FADER: It adjusts the level of the channel signal.

* See connection scheme on page 7

MASTER SECTION



AUX SENDS

18. It controls the signal general level to send to AUX SENDS 1. Push button SOLO to view level on LED indicators.
19. It controls the signal general level to send to AUX SENDS 2 and to DSP; Level is shown on DPS LED indicators. Push button SOLO to view level on LED indicators too.
20. This unbalanced Jack sends the signal of all input channels AUX (8) controls together with STEREO AUX RETURNS 1 (25) signal.
21. This unbalanced Jack sends the signal of all input channels FX (10) controls

STEREO AUX RETURNS

22. It controls the signal level arriving from STEREO AUX RETURNS 1 (25) towards the MAIN MIX
23. It controls the signal level arriving from STEREO AUX RETURNS 1 (25) towards AUX SEND 1 (20).
24. It controls the signal level sent to STEREO AUX RETURNS 2 (26)

It also determine the action level of the internal DSP. The button located next to it allows you to send the signal to MAIN MIR or to ALT 3-4.

25. Unbalanced Jack connectors of the auxiliary stereo input. In case of mono signal, use left connector
26. Unbalanced Jack connector of the auxiliary stereo input. In case of mono signal, use left connector

HEADPHONES

27. Switch to select the source to send to the headphones output and to view signal level on the LED indicators
28. Controls general signal level to send to headphones Jack and CONTROL ROOM OUT output
29. Jack stereo to connect headphones

CD/TAPE - 2TR/USB

30. Auxiliary input RCA connectors
31. Auxiliary output RCA connectors (MAIN MIX)
32. Button to send input signal to CD/TAPE and/or 2TR/USB to MAIN MIX, and vice versa to send output signal from MAIN MIX to CD/TAPE and/or 2TR/USB.

DSP

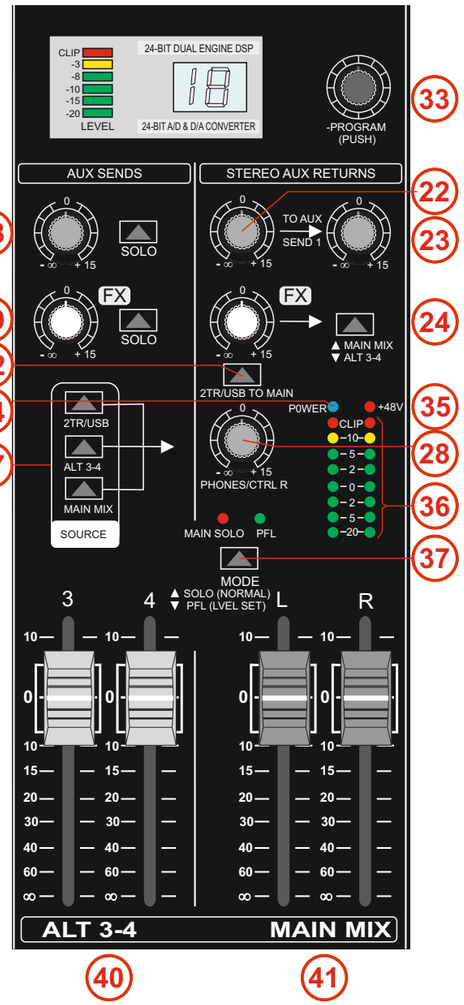
33. DSP - Digital effect processor. Rotate this switch in both directions to preset effect you want to use. See details of effects on page 7-

Various

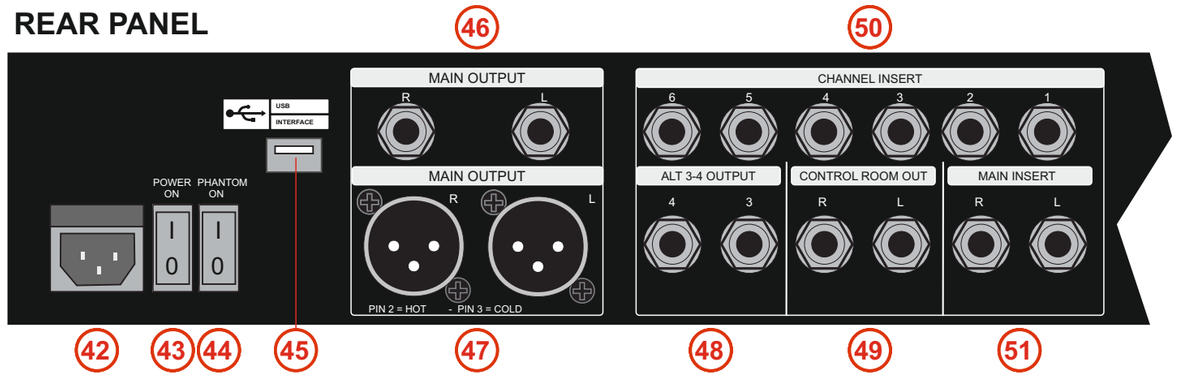
34. LED BLUE light Mixer is on
35. LED RED light, Phantom is connected
36. LED level indicators (red Clipping)
37. MODE: Button to select the signal (SOLO or PFL) to send to LED level indicator.
38. FX FOOTSW: allows you to use a footswitch to use or not to use preset effects
39. LAMP: bayonet connector to plug a lamp (12 v CC - 400 mA max) to MAIN - ALT FADER

MAIN - ALT FADER

40. FADER to control left and right levels of the ALT 3-4 bus
41. FADER to control left and right level of the main MAIN MIX bus

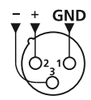


REAR PANEL



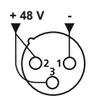
42. Power supply and fuse connection
43. Mixer switch on button
44. Phantom + 48V power supply switch
45. USB connection
46. 6.3 mm Jack balanced connections for main output MAIN OUTPUTni
47. XLR balanced connections for main output MAIN OUTPUT
48. 6.3 mm Jack unbalanced connections for ALT 3-4 output
49. Control Room output or additional output of MAIN MIX program with 6.3 mm mono unbalanced Jack
50. Stereo Jack connections of each channel, to operate signal externally (equalization / compression/etc.)
51. MAIN MIX output stereo Jack connections to operation signal externally

CONNECTIONS

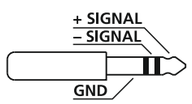


XLR 3 Female

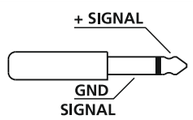
XLR 3 Male



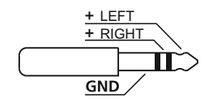
Phantom Power Supply



Jack 6,3 Balanced



Jack 6,3 Unbalanced



Jack 6,3 Stereo

DSP EFFECTS

00 SMALL HALL
03 MID HALL
06 BIG HALL
09 CHURCH
10 SMALL ROOM
13 MID ROOM
16 BIG ROOM
19 CHAPEL
20 SPRING
27 SPRING
30 GATER REV
36 REVERSE
40 EARLY REFL
44 AMBIENCE
48 STADIUM
49 AMBIENCE FX
50 DELAY
59 ECHO
60 CHORUS
66 FLANGER
70 PHASER
74 PITCH SHIFT
80 CHORSU & REVERB
82 FLANGER & REVERB
84 PHASER & REVERB
86 PITCH & REVERB
88 DELAY & REVERB
90 DELAY & GATED
91 DELAY & REVERSE
92 DELAY & CHORUS
94 DELAY & FLANGER
96 DELAY & PHASER
98 DELAY & PITCH

INSERT CONNECTIONS